

Name: Prof. Dr. Engr. Asim ur Rehman Khan

Designation: Professor and Vice Chancellor, Indus University, Karachi

Qualification: PhD Electrical Engineering, Polytechnic University (now NYU), NY, USA, 1993
MS Electrical Engineering, South Dakota State University, South Dakota, USA.
1987
BSc Electrical Engineering, UET Lahore, Pakistan, 1981

Email: vc@indus.edu.pk, asim.rehman@ieee.org

Research: Google Scholar: <https://scholar.google.com/citations?hl=en&user=eBvJPssAAAAJ>

Sites/Links: LinkedIn: <https://www.linkedin.com/in/asim-ur-rehman-khan-69525327/>

Research gate: <https://www.researchgate.net/profile/Asim-Ur-Rehman-Khan>

Profile:

Dr. Asim ur Rehman Khan completed his BSc in Electrical Engineering from UET, Lahore in 1981. He completed MS Electrical Engineering in 1987 from South Dakota State University, South Dakota, USA. He completed PhD in Electrical Engineering from Polytechnic University (now NYU), Brooklyn, New York (NY), USA in 1993. His PhD research was in Computer Vision (CV) and Machine Learning (ML).

He worked as Field Test Engineer in Pakistan Railway's project for connecting Railway Stations with the locomotives using Microwave, UHF, and VHF links, during 1982 and 1983. He worked in SUPARCO (Pakistan's space program) first on PAKSAT (a geo-stationary satellite) feasibility, and later on Badr-B (a small experimental satellite) during 1984-1995. During 1996, he taught at Sir Syed University of Engineering & Technology (SSUET) as Associate Professor. He worked in Crescent Software (Pvt) Ltd. (Cressoft) during 1997-2001, where he was involved in software development for various local and foreign companies. He taught at Karachi campus of National University of Computer and Emerging Sciences (NUCES) during 2002-2020 as Professor. He also served as Heads of Telecommunications Engineering, Computer Engineering, and Electrical Engineering departments. He also worked as Director of Karachi campus during 2011-2013. Currently he is Professor, Vice Chancellor, and Director ORIC at Indus University.

He is highly motivated for pursuing research, and looking for dedicated PhD students.

Research Interest: Computer Vision, Machine Learning, Artificial Intelligence (AI), and Data Sciences (DS)

PUBLICATIONS

Journal

- Asim ur Rehman, “Abstract, PhD thesis on Detection of Moving Objects in the Presence of Noise”, Machine Vision & Applications, Springer-Verlag, vol. 7, issue 2, June 1994. P.123 (1994). <https://link.springer.com/article/10.1007/BF01215807>
- Muhammad Junaid Rabbani, Asim-ur-Rehman Khan. “Design & Implementation of Sate Estimation Based Optimal Controller Model Using MATLAB/SIMULINK”, International Journal of Emerging Science and Engineering (IJESE), Volume 1, Issue-11, September 2013, 64-69. IF: 1.190 <https://www.ijese.org/wp-content/uploads/Papers/v1i11/K04780911113.pdf>
- Asim-ur-Rehman Khan, Syed Muhammad Atif Saleem, Haider Mehdi, “Detection of edges using two-way nested design”, International Journal of Advanced Computer Science and Applications (IJACSA), vol. 8, No. 3, 2017. <https://thesai.org/Publications/ViewPaper?Volume=8&Issue=3&Code=IJACSA&SerialNo=21>
- Asim-ur-Rehman Khan, Haider Mehdi, Syed Muhammad Atif Saleem, “A Comparison of Predictive Parameter Estimation using Kalman Filter and Analysis of Variance”, International Journal of Advanced Computer Science and Applications (IJACSA), vol. 8, No. 8, 2017. <https://thesai.org/Publications/ViewPaper?Volume=8&Issue=8&Code=IJACSA&SerialNo=57>
- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, Syed Muhammad Atif Saleem, Muhammad Asad Khan, “Analysis of Device-to-Device Communication System in the Presence of Multiple Co-Channel Interference”, University of Sindh Journal of Information and Communication Technology (USJICT), Vol. 2, Issue 1, April 2018. <https://sujo.usindh.edu.pk/index.php/USJICT/article/view/510>
- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, Syed Muhammad Atif Saleem, “Analysis of D2D Communications over Gamma/Nakagami Fading Channels”, Engineering, Technology & Applied Science Research (ETASR), Vol. 8, No. 2, pp. 2693-2698, 2018. <https://www.etasr.com/index.php/ETASR/article/view/1828>
- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, Syed Muhammad Atif Saleem, “Analysis of Device-to-Device Communications over Double Generalized Gamma Channels”, Engineering, Technology & Applied Science Research (ETASR), Vol. 8, No. 4, pp. 3265-3269, 2018. <https://etasr.com/index.php/ETASR/article/view/2230>
- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, Syed Muhammad Atif Saleem, “Analysis of D2D Communication System over k- μ Shadowed Fading Channel”, Engineering, Technology & Applied Science Research (ETASR), Vol. 8, No. 5, pp. 3405-3410, 2018. <https://etasr.com/index.php/ETASR/article/view/2291>
- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, Syed Muhammad Atif Saleem, “Outage Analysis of Device-to-Device Communication System”, Visnyk NTUU KPI Seriiia –

Radiotekhnika Radioaparotobuduvannia, issue 74, pp.36-43, 2018.
<https://ela.kpi.ua/bitstream/123456789/24807/1/8.pdf>

- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, Syed Muhammad Atif Saleem, "Analysis of D2D Communication over N*Nakagami Channels", International Journal of Future Generation Communication and Networking, vol. 11, no. 6, pp. 59-70, 2018.
http://article.nadiapub.com/IJFGCN/vol11_no6/5.pdf
- Asim ur Rehman Khan, Farrokh Janabi-Sharifi, Mohammad Ghahramani, Muhammad Ahsan Rehman Khan, "Comparison of reducing the speckle noise in ultrasound medical images by Discrete Wavelet Transforms", International Journal of Advanced Computer Science Applications (IJACSA), vol. 10, No. 5, 2019.
<https://thesai.org/Publications/ViewPaper?Volume=10&Issue=5&Code=IJACSA&SerialNo=42>
- Asim ur Rehman Khan, Muhammad Burhan Khan, Haider Mehdi, Syed Muhammad Atif Saleem, "Moving Object Detection in Highly Corrupted Noise using Analysis of Variance", International Journal of Advanced Computer Science and Applications (IJACSA), vol. 10, No. 6, 2019.
<https://thesai.org/Publications/ViewPaper?Volume=10&Issue=6&Code=IJACSA&SerialNo=29>
- Aamir Ali, Asim ur Rehman Khan, Haider Mehdi, Zakir Hussain, "Relay Selection in Cooperative Wireless System, "International Journal of Computer Science and Network Security (IJCSNS), vol. 19, no. 7, July 2019.
http://paper.ijcsns.org/07_book/201907/20190710.pdf
- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, Aamir Ali, "Performance Analysis of D2D Communication System over η -u Fading Channel", International Journal of Computer Science and Network Security (IJCSNS), Vol. 19, No. 10, pp.15-19, October 2019.
http://paper.ijcsns.org/07_book/201910/20191003.pdf
- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, Aamir Ali, "D2D Communications over k-u Shadowed Fading Channel", International Journal of Computer Science and Network Security (IJCSNS), Vol. 19, No. 12, pp.1-6, December 2019.
http://paper.ijcsns.org/07_book/201912/20191201.pdf
- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, and Aamir Ali, "Performance Analysis of Communication System with Fluctuating Beckmann Fading", Infocommunications Journal, Vol. 11, No. 4, June 2019. http://real.mtak.hu/131191/1/InfocomJ_2019_4_6_Hussain.pdf

Conference

- Asim ur Rehman, “Image Based LAN Applications”, IEEE Regional Conference, Karachi Section, September 3, 1994.
- Asim ur Rehman, Khalid Bashir, Abdul Majid, “Small Satellite and Applications”, 2nd Asia-Pacific Conference on Multilateral Cooperation in Space Technology and Applications, Islamabad, Pakistan, April 22-26, 1995.
- Asim ur Rehman, Khalid Bashir, “On Board Computer for a Small Multi-mission Satellite”, 2nd Asia-Pacific Conference on Multilateral Cooperation in Space Technology and Applications, Islamabad, Pakistan, April 22-26, 1995.
- Asim ur Rehman Khan, “Quadrature Filter Design”, Presented at the Institute of Engineers, Karachi, 9-11 May, 1996.
- Abid Karim, Asim ur Rehman, Khalil A. Ansari, “Active Local Area Optical Fiber Network”, IEEE, Karachi, 23rd November, 1996.
- Asim ur Rehman, Syed Ahmed Umar, “New Telecommunications Network Management Strategies”, Second national Multi-topic Conference, IEEE (Pakistan), Islamabad, April 26-27, 1997.
- Asim ur Rehman, “Telecommunication Network Management”, IEEE Conference “IT & Telecom”, August 1st, 1998.
- Asim ur Rehman, “Secure IT Networks”, Seminar on self-reliance in Naval Defence Technologies on 21-22 February, 1999 at Bahria Auditorium.
- Asim ur Rehman, “Secure Electronic Commerce”, IEEE Conference on “Millennium Technologies” at Avari Towers on November 27th, 1999.
- Asim ur Rehman, “Needs of Software Industry”, IEEE Seminar on Digital Economy, Avari Towers, Karachi on August 19th, 2000.
- Misbahuddin Mirza, Asim ur Rehman, Zubair Shaikh, Ovais A. Khan, “A Parallel Distributed Environment for Pakistan”, IEEE INMIC 2003, 8-9th Dec 2003.
- Asim ur Rehman, Misbahuddin Mirza, “Challenges of Information Technology”, IT Workshop, Dec 23-24th, 2003
- Muhammad Usman Aslam, Asim ur Rehman, “Distributed Authentication & Authorization Mechanism for Wireless Networks, IEEE INMIC 2005, December 24-25, 2005
- Irshad Khan, Asim ur Rehman, Performance Evaluation of H.264 Video Transmission in CDMA2000 Network, ICIET 2007, July 6-7, 2007, Karachi.
- Asim ur Rehman, Rashid Hussain, Software Project Management Methodologies / Framework Dynamics “A Comparative Approach”, ICIET 2007, July 6-7 2007, Karachi.

- Muhammad Junaid Rabbani, Kashan Hussain, Asim ur Rehman Khan, Abdullah Ali. “Model Identification and Validation for a Heating System using MATLAB System Identification Toolbox”, 1st International Conference on Sensing for Industry, Control, Communication & Security Technologies (ICSICCST 2013), June 24-26, 2013, Karachi, Pakistan.
- Muhammad Asif Raza, Asim-ur-Rehman Khan, Muhammad Raza. “A restrictive model (RM) for detection and prevention of INVITE flooding attack”, 3rd International Conference on Computer, Control & Communication (IC4), September 25-26, 2013, Karachi, Pakistan, 1-6.
- Muhammad Haris Mohsin, Asim ur Rehman Khan, Syed Haris Mujtaba, Muhammad Bilawal Khan, Usama Khalid, “An efficient carburetor design using electronic fuel injection for small vehicles”, 17th International Multi-topic Conference (INMIC) 2014, December 8-10, 2014, Karachi, Pakistan.
- Asim ur Rehman Khan, Muhammad Haris Mohsin, Abdullah Ali, Syed Hassaan Hashmi, “Quadcopter UAV Control by Skeletal Tracking: A Humanized Approach”, International Multi-topic Conference (IMTIC), Mehran University, February 11-13, 2015, Jamshoro, Pakistan.
- Asim ur Rehman Khan, “Predictive control design using ANOVA”, 2nd World Congress on Robotics & Automation, Philadelphia, Pennsylvania, USA, 2016
- Asim ur Rehman Khan, “Edge detection of moving object in the highly corrupted noise”, 2nd World Congress on Robotics & Automation, Philadelphia, Pennsylvania, USA, 2016
- Asim ur Rehman Khan, Muhammad Junaid Rabbani, “An ANOVA based predictive parameter estimation” International Conference on Innovations in Electrical Engineering and Computational Technologies (ICIEECT), Indus University, Karachi, April 5-7, 2017.
- Muhammad Faizan Siddiqui, Neel Kanwal, Asim ur Rehman Khan, Haider Mehdi, Aqib Noor, M. Asad Khan, “Automation and monitoring of greenhouse”, Accepted for publication in International Conference on Information & Communication Technologies (ICICT), 2017 on Dec 30-31, 2017 at IBA, Karachi, Pakistan.
- Zakir Hussain, Asim ur Rehman Khan, Haider Mehdi, Syed Muhammad Atif Saleem, Muhammad Arif, and Shabbir Hussain, “Effects of Interference on Device-to-Device Communication”, IEEE International Conference on Computing, Electronic and Electrical Engineering (ICE Cube) 2018, p. 1-4.
- Aamir Ali, Asim ur Rehman Khan, Haider Mehdi, Zakir Hussain, “Analysis of SWIPT base Relaying Network,” International Conference of Information Science and Communication Technology (ICISCT), Karachi, Pakistan, 2019, pp. 1-6.
- Muhammad Taimour Azhar, Muhammad Burhan Khan, Asim ur Rehman Khan, “Blockchain Based Crypto-currency System with Quantum Key Distribution”, International Conference on Information Communication Technologies (ICICT), IEEE, IBA Karachi, Pakistan, 15-16 November, 2019.

- Muhammad Asad Khan, Muhammad Hayyan Bin Shahid, Hassan Mansoor, Uzair Shafique, Muhammad Burhan Khan and Asim Ur Rehman Khan, IoT based Grocery Management System: Smart Refrigerator and Smart Cabinet, 4th International Conference on Systems of Collaborations, Big Data, Internet of Things and Security, (SysCobIoTS), Casablanca, Morocco, Dec. 12-13, 2019.